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7. (Amended) The apparatus of claim 68, further including a strap, said strap mounted on the outer surface of said outer layer and adapted to attach said wrap to said body surface.

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10. (Amended) The apparatus of claim 8, wherein said wrap further includes a first elastic layer positioned between said outer layer and each said TE device, and a second elastic layer positioned between each said TE device and said inner layer.

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12. (Amended) The apparatus of claim 59, wherein said wrap further includes first and second insulate layers, said insulate layers positioned between said first and second conductive layers, on opposite sides of and contacting each said TE device.

13. (Amended) The apparatus of claim 12, wherein said wrap further includes a wiring/tubing layer positioned between said first and second insulate layers.

17. (Amended) The apparatus of claim 68, further comprising at least one pressure sensor mounted to said wrap for receipt of information from said control unit.

B4

18. (Amended) The apparatus of claim 68, further comprising at least one electrode mounted to said wrap for receipt of information from said control unit and for transmission of an electric pulse to said body surface.

19. (Amended) The apparatus of claim 12, further comprising first cavity means for receipt of fluid located between and formed by said second insulate layer and said wiring/tubing layer.

20. (Amended) The apparatus of claim 12, further comprising second cavity means for receipt of fluid located between and formed by said first insulate layer and said wiring/tubing.

21. (Amended) The apparatus of claim 19, wherein said second cavity means comprises two smaller cavities, and a fluid passage connecting said smaller cavities.

22. (Amended) The apparatus of claim 20, wherein said first cavity means comprises

B4 two smaller cavities, and a fluid passage connecting said smaller cavities.

23. (Amended) The apparatus of claim 68, wherein each said TE device comprises a Peltier device.

B5 25. (Amended) The apparatus of claim 60, further comprising at least one pressure sensor disposed on said outer surface of said inner layer.

28. (Amended) The apparatus of claim 62, further comprising at least one pressure sensor disposed on the inner surface of said inner layer.

29. (Amended) The apparatus of claim 62, further comprising at least one electrode disposed on the inner surface of said inner layer.

B6 30. (Amended) The apparatus of claim 62, further comprising at least one pouch disposed on the inner surface of said inner layer for placement of at least one electrode.

31. (Amended) The apparatus of claim 62, further comprising a template for the location of each said electrode on said body surface, and the appropriate pouch disposed on the inner surface of said inner layer.

32. (Amended) The apparatus of claim 68, wherein said control unit comprises;

a power source;

a controller;

a first switch responsive to said actual temperature detected by each said temperature sensor that turns OFF said power source when said actual temperature is above a maximum temperature or below a minimum temperature;

a second switch electrically communicating with each said TE device and adapted to operate each said TE device to deliver heating or cooling; and

each said TE device connected to receive a signal from said controller corresponding to

B6 said desired temperature and to deliver one of heating and cooling to said body surface in response to said desired temperature.

48. (Amended) The device of claim 60, further comprising an electrical stimulation unit,

B7 said electrical stimulation unit connected to said microprocessor for delivery of an electrical pulse to said body surface.

52. (Amended) The device of claim 65, wherein said iontophoresis unit comprises a

B8 medication interface connected to said microprocessor, a medication controller unit connected to said medication interface, a medication dispenser connected to said medication controller, and at least one special electrode connected to said medication dispenser to deliver said medication to said body surface.

B9 54. (Amended) The device of claim 63, further comprising a data link unit connected to said microprocessor for transfer of information to and from said microprocessor.

Please add the following new claims:

59. (New) An apparatus for providing at least one of therapeutic heating and cooling to

B10 a body surface comprising:

a wrap adapted to be secured to said body surface, said wrap including an outer layer facing away from said body surface and an inner layer facing toward said body surface when said wrap is so secured, first and second elastic layers positioned between said inner and outer layers, and first and second conductive layers positioned between said first and second elastic layers;

at least one temperature sensor mounted to said inner layer for measuring an actual temperature of said body surface;

at least one TE device mounted between said first and second conductive layers to

selectively deliver heat to and remove heat from said body surface; and

a control unit mounted to said outer layer for receiving the actual temperature of said body surface from each said temperature sensor and for communication with each said TE device to operate the same as one of a heater and a cooler thereby achieving a desired temperature of said body surface.

60. (New) The apparatus of claim 12 further comprising a wiring/tubing layer disposed between said first and second insulate layers, each said TE device connected to said wiring/ tubing layer, and each said temperature sensor being positioned on the outer surface of said inner layer.

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61. (New) The apparatus of claim 12 further comprising a wiring/tubing layer disposed between said first and second insulate layers, each said TE device connected to said wiring/ tubing layer, and wherein said inner layer comprises a fluid transfer medium with each said temperature sensor being mounted to said fluid transfer medium.

62. (New) The apparatus of claim 61 further comprising a layer providing at least one expandable cavity for filling with fluid, said cavity layer disposed between said wiring/tubing layer and one of said first and second insulate layers.

63. (New) A device for achieving a desired temperature of a body surface comprising

a power source,

at least one temperature sensor that detects an actual temperature on said body surface,

a controller, said controller comprising a microprocessor having memory that stores at least one program for adjusting said desired temperature over time,

a first switch responsive to said actual temperature detected by any of said temperature sensors that turns OFF said power source when said actual temperature is either above a

maximum or below a minimum temperature,

at least one TE device connected to receive a signal from said controller corresponding to said desired temperature and to deliver at least one of heating and cooling to said body surface in response to said desired temperature,

a second switch electrically communicating with each said TE device and adapted to operate each said TE device to which it is connected to deliver one of heating or cooling, and

a heart rate sensor unit comprising an ultra miniature microphone connected to a preamp, an active switched capacitor filter connected to said preamp, at least one amplifier connected to said active switched capacitor filter, at least one digitizer connected to said amplifier, and a microprocessor connected to each said digitizer.

64. (New) A device for achieving a desired temperature of a body surface comprising

a power source,

at least one temperature sensor that detects an actual temperature on said body surface,

a controller, said controller comprising a microprocessor having memory that stores at least one program for adjusting said desired temperature, said microprocessor connected to at least one breathing rate sensor for receipt of a signal indicative of an actual breathing rate of the user,

a first switch responsive to said actual temperature detected by any of said temperature sensors that turns OFF said power source when said actual temperature is either above a maximum or below a minimum temperature,

at least one TE device connected to receive a signal from said controller corresponding to said desired temperature and to deliver at least one of heating and cooling to said body surface in response to said desired temperature, and

a second switch electrically communicating with each said TE device and adapted to operate each said TE device to which it is connected to deliver one of heating or cooling.

65. (New) A device for achieving a desired temperature of a body surface comprising

a power source,

at least one temperature sensor that detects an actual temperature on said body surface,

a controller, said controller comprising a microprocessor having memory that stores at least one program for adjusting said desired temperature over time,

a first switch responsive to said actual temperature detected by any of said temperature sensors that turns OFF said power source when said actual temperature is either above a maximum or below a minimum temperature,

at least one TE device connected to receive a signal from said controller corresponding to said desired temperature and to deliver at least one of heating and cooling to said body surface in response to said desired temperature,

a second switch electrically communicating with each said TE device and adapted to operate each said TE device to which it is connected to deliver heating or cooling,

an electrical stimulation unit connected to said microprocessor for delivery of an electrical pulse to said body surface, and

an iontophoresis unit connected to said microprocessor for delivery of medication to said body surface.

66. (New) A device for achieving a desired temperature of a body surface comprising

a power source,

at least one temperature sensor that detects an actual temperature on said body surface,

a controller, said controller comprising a microprocessor having memory that stores at

least one program for adjusting said desired temperature over time,

a first switch responsive to said actual temperature detected by any of said temperature sensors that turns OFF said power source when said actual temperature is either above a maximum or below a minimum temperature,

at least one TE device connected to receive a signal from said controller corresponding to said desired temperature and to deliver at least one of heating and cooling to said body surface to return said body surface to said desired temperature,

a second switch electrically communicating with each said TE device and adapted to operate each said TE device to which it is connected to device to deliver one of heating and cooling,

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an electrical stimulation unit connected to said microprocessor for delivery of an electrical pulse to said body surface, said electrical stimulation unit comprising a waveform generator connected to said microprocessor, a modulator unit connected to said waveform generator, a driver connected to said modulator, and at least one electrode connected to said driver to deliver said electrical pulse to said body surface, and

an evoked response detection unit comprising an ultra miniature microphone connected to a preamp, an active switched capacitor filter connected to said preamp, at least one amplifier connected to said active switched capacitor filter, at least one digitizer connected to said amplifier, and a microprocessor connected to said digitizer.

67. (New) The apparatus of claim 13, wherein each said TE device is embedded in said wiring/tubing layer.

68. (New) An apparatus for providing at least one of therapeutic heating and cooling to a body surface comprising: